REFERENCE COUNT:

14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 25 OF 44 HCAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER:

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137:201744

TITLE:

Improved method for preparation of polyether polyols with double metal cyanide catalysts

INVENTOR(S):

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PATENT ASSIGNEE(S):

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CODEN: GWXXBX

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LANGUAGE:

Patent German

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PATENT INFORMATION:

P	PATENT NO.									APPLICATION NO.					DATE		
	DE 10108485				A1		20020905		DE 2001-10108485					20010222			
									CA 2002-2438645								
W									WO 2002-EP1397 BA, BB, BG, BR, BY, B								
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	RW:										, TZ,						
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											, GW,						
									EP 2002-704707					20020211			
E1	1366																
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	I, IT,	LI,	LU,	NL,	SE,	MC,	PT,
											, TR						
Ci	CN 1501953 ·				Α		2004	0602	CN 2002-805434						20020211		
BI	BR 2002007512				Α	20040727			BR 2002-7512					20020211			
A.	AT 282655				E		2004	1215		ΑT	2002-	7047	07		2	0020	211
·J1	JP 2005506392				т2				JP 2002-568009								
P'	PT 1366106				T		2005	0331		PT 2002-704707					20020211		
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TV	TW 232227				В1		2005	0511		TW	2002-	-9110	2854		2	0020	220
Н	HK 1066231				A1		2005		HK 2004-109160					2	20041119		
PRIORI	PRIORITY APPLN. INFO.:									DE	2001-	-1010	8485		A 2	0010	222
									1	WO	2002-	-EP13	97		W 2	0020	211
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AB Procedure for preparation of polyether polyols by polyaddn. of alkylene oxides to active H-containing starting materials in the presence of double metal cyanide catalysts (DMC), whereby the reaction mixture is 1-1000 times led through a zone of energy d.  $\geq 5 + 105 \text{ J/m}3$  and has a residence time  $\geq 10-6 \text{ s}$ . The polyether polyols prepared by a jet mixer have improved foaming properties and may be used for preparation of flexible polyurethane foams. Thus, a trifunctional polyol of mol. weight 3,000 g/mol was prepared from glycerol and propylene oxide at 130° using a DMC catalyst and by treatment with a jet mixer. Then, to a mixture of 100 g polyol, 6 g H2O, 0.60 g silicone

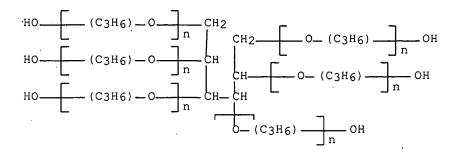
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stabilizer (Tegostab BF 2370), 0.15 g Desmorapid SO, and 0.10 g
     bis(dimethylamino)ethyl ether (as catalysts), 73.40 g Desmodur T80 was admixed
     under stirring. The foaming mixture was 30 min stored in a drying oven at
     100°. The foam was of fine, regular cell structure without any cracks and
     collapses.
     ICM C08G065-10
     ICS C08G065-26; C08G018-48
     35-7 (Chemistry of Synthetic High Polymers)
CC
     polyether polyol double metal cyanide catalyst prepn;
ST
     polyurethane flexible foam polyether polyol DMC prepn;
     glycerol propylene oxide polyol Desmodur T80 polyurethane foam; sorbitol
     propylene oxide polyol Desmodur T80 hydrazine polyurethane foam
ΙT
     Polymerization catalysts
        (double metal cyanide; improved method for preparation of polyether
        polyols with double metal cyanide catalysts)
ΙT
     Plastic foams
     RL: TEM (Technical or engineered material use); USES (Uses)
        (flexible; improved method for preparation of polyether
        polyols with double metal cyanide catalysts)
     Polyoxyalkylenes, preparation
ΙT
     RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or
     engineered material use); PREP (Preparation); USES (Uses)
        (improved method for preparation of polyether polyols
        with double metal cyanide catalysts)
     Mixers (processing apparatus)
ΙT
        (jet; improved method for preparation of polyether polyols
        with double metal cyanide catalysts)
     Polyurethanes, preparation
ΙT
     RL: SPN (Synthetic preparation); TEM (Technical or engineered material
     use); PREP (Preparation); USES (Uses)
        (polyoxyalkylene-, flexible foams; improved method for preparation of
        polyether polyols with double metal cyanide
        catalysts)
                               3033-62-3, Bis(dimethylamino)ethyl ether
     301-10-0, Desmorapid SO
ΙT
     RL: CAT (Catalyst use); USES (Uses)
        (for polyurethane preparation; improved method for preparation of
        polyether polyols with double metal cyanide
        catalysts)
     52625-13-5P, Propylene oxide-sorbitol copolymer 151274-15-6P,
IT
     Poly[oxy(methyl-1,2-ethanediyl)], \alpha,\alpha',\alpha''-1,2,3-
     propanetriyltris[ω-hydroxy-polymer with Desmodur T80
     452962-84-4P
     RL: PRP (Properties); SPN (Synthetic preparation); TEM
     (Technical or engineered material use); PREP (Preparation); USES
     (Uses)
        (improved method for preparation of polyether polyols
        with double metal cyanide catalysts)
     25791-96-2P, Glycerol-propylene oxide copolymer
IT
     RL: SPN (Synthetic preparation); TEM (Technical or engineered material
     use); PREP (Preparation); USES (Uses)
        (improved method for preparation of polyether polyols
        with double metal cyanide catalysts)
     75-65-0, tert.-Butanol, uses
ΙT
     RL: CAT (Catalyst use); USES (Uses)
        (ligand of DMC catalyst, for polyol preparation; improved method for
preparation
        of polyether polyols with double metal cyanide
        catalysts)
ΙT
     14049-79-7, Zinchexacyanocobaltate
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RL: CAT (Catalyst use); USES (Uses)

10/828,800 (with tert.-butanol ligands, for polyol preparation; improved method for preparation of polyether polyols with double metal cyanide catalysts) ΙT 151274-15-6P, Poly[oxy(methyl-1,2-ethanediyl)],  $\alpha, \alpha', \alpha''-1, 2, 3$ -propanetriyltris[ $\omega$ -hydroxy-polymer with Desmodur T80 452962-84-4P RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (improved method for preparation of polyether polyols with double metal cyanide catalysts) RN 151274-15-6 HCAPLUS Poly[oxy(methyl-1,2-ethanediyl)],  $\alpha,\alpha',\alpha''-1,2,3$ -CN propanetriyltris[ω-hydroxy-, polymer with Desmodur T 80 (9CI) (CA INDEX NAME) 1 CM 55887-98-4 CRN Unspecified CCI MAN \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\* 2 CM25791-96-2 (C3 H6 O)n (C3 H6 O)n (C3 H6 O)n C3 H8 O3 CMF CCI IDS, PMS O— (C3H6) — OH O— (СЗН6)—

452962-84-4 HCAPLUS RN Hydrazine, polymer with Desmodur T 80 and  $\alpha$ -hydro- $\omega$ -CN hydroxy[poly[oxy(methyl-1,2-ethanediyl)]] ether with D-glucitol (6:1) (9CI) (CA INDEX NAME) CM1 55887-98-4 CRN Unspecified CMF MAN CCI \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

2 CM52625-13-5 CRN (C3 H6 O)n CMF H14 06 IDS, PMS CCI



CM 3

302-01-2 CRN CMF H4 N2

 $H_2N-NH_2$ 

ΙT 14049-79-7, Zinchexacyanocobaltate

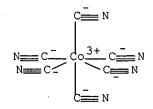
RL: CAT (Catalyst use); USES (Uses)

(with tert.-butanol ligands, for polyol preparation; improved method for preparation of *polyether polyols* with double metal cyanide catalysts)

14049-79-7 HCAPLUS

RN

CNCobaltate(3-), hexakis(cyano- $\kappa$ C)-, zinc (2:3), (OC-6-11)- (9CI) (CA INDEX NAME)



 $\bigcirc$ 3/2 Zn<sup>2+</sup>